- 68. This example reflects a situation that is actually likely to occur. It is reasonable to expect that the experience of CLECs will be much more variable, because of the newness of the support mechanisms and lower level of activity, than that of Ameritech. Therefore, measures similar to "% exceeding target" and "% exceeding agreed upon intervals" should be avoided in favor of actual measures of performance that are appropriately discrete and that include the actual mean performance along with a statistical measure of variation around the resulting mean for the measure
- 69. It is also important to account for the activity mix in any measurement plan. The activity mix consideration is similar, in many respects, to the service mix issue. Many types of activities may be involved within the process of successfully completing a single business task. As a simple example, service repair may in some cases involve a premise visit, while in other cases remotely managed restoration is possible. Whether or not a premise visit is required will impact upon the expected (and actual) restoration interval, regardless of the service being supported.
- 70. The example below, illustrates how the frequency with which a premise visit occurs influences an aggregated measure for the restoration interval:

	Restoration Interval (hours	% Tickets	wtd Component (hours)
Company 1			
PREMISE VISITS REQUIRED	8	40%	3.20
NO PREMISE VISIT	3	60%	1.80
AVERAGE RESTORATION INTERVAL			5.00
Company 2			
PREMISE VISITS REQUIRED	8	60%	4.80
NO PREMISE VISIT	3	40%	1.20
AVERAGE RESTORATION			
INTERVAL			6.00

- 71. As this preceding illustration demonstrates, even where two companies are experiencing the same performance at the activity level, the average performance can look very different due to variations in the mix of key activities. For this reason, Ameritech should provide disaggregated performance measures when differences in the underlying mix of activities could reasonably be expected to influence the aggregate measures.
- 72. Areas where this can be expected to occur are outlined in Attachment II (previously submitted in Illinois as part of my supplemental testimony). With the exception of billing and network related activity measures, which Ameritech does not address at all, the key

measures tend to be in fairly close alignment. Ameritech does not discuss whether or not additional attributes relating to activity drivers will be captured and stored so that meaningful comparisons of results can be made.

- 73. The same problem of using "% exceeding target" and similar measures, which I have discussed for the service mix, also apply to the activity mix. Again, actual measures of the mean performance are preferable, combined with some measure of statistical variation, such as a 95% confidence interval for the mean of the measurement reported.
- 74. Measures must also be established at the unbundled network element level as well as the service level. As the FCC stated in its Order of August 8, 1996 (¶ 525) delivery of nondiscriminatory OSS access is a requirement not only for services resale but also for unbundled network elements. As I mentioned earlier in my statement, the FCC is looking to the state commissions to establish measurements which demonstrate that nondiscriminatory access is and continues to be delivered (¶ 311).
- 75. Service level measures, if properly defined, may help detect discriminatory behavior relating to the support of services resale and, to a lesser extent, the use of unbundled network elements in combination. However, detecting discriminatory conditions and assuring the absence of discrimination at the network element level requires more focused measures. These measurements will typically be very limited in scope and will not be service oriented but rather will be oriented to access delivered to specific unbundled network elements, such as access to OSS functionality.

- 76. The measures proposed by Ameritech for operations support systems are not adequate to determine whether nondiscriminatory access is being provided to competitors.
- 77. Ameritech has provided very little detail regarding its proposed performance measures for access to operations support systems. Only three measures are listed for the OSS unbundled element platform availability, transaction accuracy, and business function completion window and only a generic heading of operational support systems is shown. While the proposed measures sound like they address the tests that I have proposed for nondiscriminatory access equivalent availability, accuracy and timeliness the descriptive material that Ameritech has placed in the record is far too limited to draw any conclusions regarding the effectiveness of the proposed measures.
- 78. First, it is not clear that Ameritech intends to monitor and report results for each interface (Mickens, Response to AT&T Data Request 2.46b in Illinois). As Mr. Mickens notes in his testimony, there are no less than nine different interfaces (Mickens Aff., p. 17). Each supports a very different but critical process. It makes no sense to allow Ameritech to construct a set of measures where good availability performance on the part of, for example, a billing interface could mask the very poor performance on the part of another interface, such as maintenance and repair.
- 79. Perhaps Ameritech intends to provide reported measurement for each of the nine interfaces. However, I cannot draw that a conclusion that such a commitment exists based on the testimony that has been offered to date. For example, in defining the calculation for platform

availability, the reference is to interfaces which indicates to me an intent to combine all interfaces into a single reported measure (Mickens Illinois Testimony, Schedule 5, Section 3, p. 1).

- 80. The Commission should assure itself that Ameritech will provide separately reported comparative measures for each of the nine interfaces that Mr. Mickens identified (Mickens Aff., p. 17) pre-ordering transactional interface (EDI), pre-ordering batch interface (file transfer), ordering transactional interface (EDI), ordering batch interface (ASR), provisioning, maintenance and repair, usage billing information (EMR), services resale billing information (AEBS), and UNE billing information (CABS).
- 81. Beyond measuring and reporting results for each interface, all the measures need to be better defined and further refined. While I can understand Ameritech's desire to quickly move through these proceedings, the establishment of a meaningful measurement plan is an obligation that the FCC squarely places upon this Commission and such a measurement plan is to critical safeguarding the development of competition. The measures ultimately adopted by this Commission will represent the only on-going means to promptly assess whether the requirement of nondiscriminatory access is being met. It would be imprudent to simply accept, on faith, Ameritech's unilateral proposal of such key measures and their definition.
- 82. Ameritech's proposed platform (not to be confused with the UNE platform, a combination of loop, local switching, and common transport requested by AT&T) availability measure also needs to be revised. The proposed platform availability measurement is calculated by dividing the "time the OSS interfaces are not available by the total time available" (Mickens Illinois

Testimony, Schedule 5, Section 3, p. 1). I assume that the definition of "available" is that the interface under consideration is incapable of processing transactions. Ameritech did not provide that critical definition.

- 83. Given that understanding, the platform availability measure needs to be modified to reflect at least a differentiation of business hours (e.g., 8:00AM to 5:00PM) versus non-business hours performance. For example, if the pre-ordering interface is unavailable for three hours between 8:00 AM and 5:00 PM on a business day, that would have much greater competitive market impact (i.e., customer dissatisfaction) than if the same interface were to be unavailable for the same amount of time from 2:00AM to 6:00AM on a Sunday. Ameritech should state availability measures separately for "within normal business hours" and "outside normal business hours" for each interface in order to address the situation I just described.
- 84. In addition, while a comparison to Ameritech's own experience is proposed, it is not at all clear how this will be accomplished for the platform availability. Ameritech's retail local exchange service support agents and processes do not currently use any interface in common with the CLEC (Rogers, Response to AT&T Data Request 2.40a in Illinois). Ameritech, therefore, needs to clarify how the availability measure will be determined with respect to Ameritech.
- Ameritech's proposed accuracy and timeliness measures. Again, Ameritech has provided only very limited descriptive material, but based upon what is available, the measures are far too aggregated.

 Mr. Mickens states that Ameritech "is committed to assuring that the availability, transaction

accuracy and timeliness of these interfaces are at parity with the internal use of these same functions" (Mickens Illinois Testimony, p. 23). By explicitly using the word "transaction" in the statement of Ameritech's commitment, I understand Ameritech to mean that both accuracy and timeliness will be measured for key transactions as opposed to only providing a meaningless measure of a mixture of transactions. If that is not Ameritech's intent, then serious questions regarding inadequacies of the measures would exist as I just discussed for platform availability. Indeed Ameritech has indicated that the data will be collected at the transaction level but reported only at the aggregate level (Mickens, Response to AT&T Data Request 2.46d in Illinois).

- 86. Furthermore, each transactional measure should be specific to a single interface. The accuracy and timeliness of transactions is crucial to quality execution of the process supported by the interface. It is the successful execution in terms of both timeliness and accuracy of these transaction that will permit CLECs to provide customer servicing that is competitive with that of Ameritech. Because of the varying types of transactions, the differing intensity of use and differing times involved for processing, monitoring measures that aggregate all transactions would be virtually useless.
- 87. Assuming the CLECs can monitor appropriate transactional measures for the performance they experience, they will still lack the comparable Ameritech measures necessary to determine whether or not the OSS access is nondiscriminatory. Therefore, Ameritech must be required to provide appropriate transaction level measures of both quality and timeliness.

- 88. The transactional measures are specific to each interface and can become quite extensive. Nevertheless, certain key measures, undoubtedly, can be identified that balance the need to monitor the delivery of nondiscriminatory access to OSS functionality without becoming overly burdensome. Moreover, many of these or similar measures are used by customer focused businesses to assess performance of their business processes.
- 89. The basic measure that AT&T believes will initially serve the purpose of monitoring transaction accuracy and timeliness, for each interface, are listed in Attachment III (previously submitted to the Illinois Commission as part of my supplemental testimony).
- 90. It is possible that the actual values for such transactional measures could be considered proprietary. If the CLECs or Ameritech perceive that such information is proprietary, then an alternative means for reporting actual measures must be established.
- 91. For example, the individual companies could submit their individual performance to an unaffiliated entity that is bound by appropriate non-disclosure agreements. That entity could review and analyze the data and provide report cards to the Commission and appropriate individual CLEC report cards. The report card could show, for each transactional measure, a simple indication whether, at a 95% level of confidence, that the performance experienced by the CLEC is no less than that experienced by Ameritech.
- 92. Assuming cooperation by industry participants, the analysis process does not seem overly complex. Because of the criticality of the information to all parties, if cost

recovery is an issue, then the costs of the "report card" should be recovered in a competitively neutral manner.

- 93. Naturally, the implementation details would need to be worked out. It seems reasonable to expect that a team of industry representatives could devise a mechanism for reporting performance, funding the work and submit a plan for Commission approval in a relatively short time frame. Naturally clarity and consensus regarding what is actually to be measured and reported would be required as an input.
- 94. Although the above discussion has focused only on the proposed OSS and service level measures, there are other measures relating to unbundled network elements that should also be addressed. Ameritech is obligated to provide nondiscriminatory access to all unbundled network elements and to combinations of UNEs that CLECs request and that are technically feasible to provide. There is no limitation, when the FCC looked to the state commission for input regarding measurements, that any form of access to unbundled network elements was excluded from monitoring. Accordingly, Ameritech must provide meaningful tracking that demonstrates nondiscriminatory access is indeed being delivered where UNEs are employed by a CLEC, whether used individually or in combination.
- 95. The testimony of Mr. Mickens shows a prototype for a measurement plan addressing unbundled loops, SS7 links, operator services and directory assistance (Mickens Illinois Testimony, Schedules 6, 8, 9 and 12). With the exception of the unbundled loops, the proposed measurements do not even begin to address more than a single dimension of the three-part test for

nondiscriminatory access (i.e., availability, timeliness, accuracy). This lack of comprehensive measures is the first deficiency that must be corrected.

96. In addition to the paucity of measures, no enlightenment is provided regarding measurements applicable to other unbundled network elements or unbundled element combinations. Ameritech, however, is silent regarding how nondiscriminatory access will be demonstrated and monitored for this crucial UNE combination.

CONCLUSION

- 97. The interfaces proposed by Ameritech in this case for access to its operations support systems and databases do not meet those requirements because (1) CLECs cannot rely on Ameritech's interface specifications because they are still being revised, (2) several of the essential OSS interfaces which Ameritech claims to have deployed within the last month have never been used or tested by any CLEC, (3) testing of other OSS interfaces by AT&T has not produced satisfactory results, and (4) Ameritech has not demonstrated that its interfaces will provide parity of access to Ameritech's operations support systems.
- 98. Ameritech's proposed measurements are, at this point, inadequate to demonstrate the existence of nondiscriminatory access either to unbundled network elements in general and to operations support systems in specific. As a minimum, Ameritech needs to make numerous clarifications, expand the measures to address all the UNEs and UNE combinations requested to date, assure that the measurements will address each of the nine OSS interfaces that

MPSC CASE NO. U-11104 AFFIDAVIT OF . MICHAEL PFAU

Ameritech claims to offer, commit to meaningful service and transactional level measures, show that useful statistical tests can and will be applied to demonstrate the absence of discrimination, and provide actual results that prove nondiscriminatory access is, in fact, being delivered. More importantly, the Commission must feel confident that the measurement plan ultimately produced adequately reflects the structure and detail necessary to protect developing competition in local services market.

STATE OF MICHIGAN BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter, on the Commission's own)	
motion, to consider Ameritech Michigan's)	
compliance with the competitive checklist)	Case No. U-11104
in Section 271 of the Telecommunications)	
Act of 1996)	2.

AFFIDAVIT OF ROBERT SHERRY ON BEHALF OF AT&T COMMUNICATIONS OF MICHIGAN, INC.

STATE OF ILLINOIS)	
)	SS
COUNTY OF COOK)	

I, Robert Sherry, being duly sworn upon oath, do hereby depose and state as follows:

- My name is Robert Sherry. My business address is 227 West
 Monroe, Suite 10NP5, Chicago, Illinois 60606.
- 2. I am employed by AT&T Corp. as a Principal Member of
 Technical Staff. My organization is referred to as Local Infrastructure Technical
 Planning. I am responsible for network architecture planning for AT&T's Local Service
 Offering in the Central States. In this capacity, I review and recommend new technology
 to support service offerings, identify architecture alternatives that will fulfill business

objectives and provide a liaison between headquarters planning and regional implementation for the local network.

- 3. I have over 26 years of experience with AT&T and Bell Laboratories in the areas of product development, network architecture planning, product planning and product management. I have an A.S. in Engineering from DeVry, a B.S. in Math from Benedictine University and a M.S. in Computer Science from Illinois Institute of Technology.
- 4. I was a primary developer on the original release of the 4ESS

 Switch which was the first digital switch introduced in the United States. My assignment included design and development of fault recovery, human interface and systems integrity software programs. In this role, I became a recognized industry expert on fault tolerant computation. I also formed a team to evaluate and formulate the architecture for the 5ESS-2000 switch as AT&T introduced digital switching into the local telephony market and was an integral part of the team that defined the distributed processing architectural evolution plan for the 5ESS-2000 Switch. I also lead organizations responsible for product development for AT&T's toll network and signaling products including the 4ESS Switch, STP and NCP.

- responsible for evaluating the technical capabilities and business positioning of vendors competing with AT&T's switching product line. I lead the system engineering organization responsible for introducing the first application of ISDN into McDonald's Corporation. I was also responsible for strategy development and new feature planning for ISDN on the 5ESS-2000 Switch. In this capacity, I developed a cohesive strategy for the evolution of ISDN that included market assessment, opportunity forecasts, competitive assessment and implementation tactics. This strategy was used to drive work programs ranging from market communications to product development. In addition, I have planned and managed the introduction of new features to evolve the applicability of ISDN in the areas of ISDN Centrex, data and inter-networking.
- 6. The purpose of my testimony is to set forth a number of significant shortcomings in Ameritech's application for relief under Section 271 as they relate to Ameritech's obligations to provide unbundled network elements. As this proceeding is not being developed on a full record due to the lack of time, and as Ameritech has failed to provide the appropriate notice requested by the Commission prior to filing its Section

In preparing this testimony, I have reviewed the Interconnection Agreement between AT&T Communications of Michigan, Inc. and Ameritech Information Industry Services, and the testimony of the various Ameritech witnesses in this docket and in the Section 271 filing made by Ameritech before the FCC. These filings include materials submitted in this docket that were originally filed before the Illinois Commerce Commission as rebuttal testimony in I.C.C. Docket No. 96-0404. I also refer to certain tariff filings made by Ameritech in Illinois that discuss aspects of similar offerings being made by Ameritech in Michigan.

271 application at the FCC, this affidavit does not undertake to set forth all the deficiencies in Ameritech's application. Instead, it will focus on major actions that Ameritech has taken in an effort to frustrate competitive entry into the local exchange by undermining the viability of the unbundled switching element and the unbundled platform, one of the principal entry strategies available to CLECs. These deficiencies include:

- o Ameritech imposes several unlawful restrictions on the use of the unbundled local switch ("ULS") and the unbundled platform, including restrictions on the right of the purchaser of the ULS to charge for terminating access, notwithstanding the FCC direction that purchasers of the ULS are entitled to all exchange and exchange access revenues, including termination charges.

 Ameritech also seeks to deny the purchaser of the ULS element the right to provide originating and terminating access for 800 service calls.
- o Ameritech will not provide the necessary billing information to permit a CLEC to bill for terminating access charges.
- Ameritech seeks to undermine the unbundled switch and the unbundled platform by requiring purchasers of those elements to use the bona fide request process to obtain customized routing of operator services and directory assistance

calls. Although the Michigan Commission has referred to possible issues of technical feasibility relating to customized routing of OS/DA calls, Ameritech has not established that customized routing is not technically feasible, and the commitments of Bell Atlantic, NYNEX, and Southwestern Bell to provided customized routing of OS/DA calls demonstrate that customized routing is technically feasible for almost all switches used in an RBOC network, including those of Ameritech.

Ameritech offers a distorted form of "shared" transport that is functionally the same as dedicated transport and does not satisfy the shared or common transport element envisioned under the Act and the FCC regulations. Ameritech's version of "shared" transport requires a CLEC to purchase dedicated transport and then arrange with other carriers to share the facilities, in essence requiring the carrier to act as a reseller of dedicated transport services. This is a huge burden for CLECs, is totally impractical and uneconomic, and would force purchasers of the unbundled switch or unbundled platform to purchase Ameritech's high-cost alternative transport service. In short, Ameritech's offering is inconsistent with the Act and the FCC's regulation and it would undermine the viability of the unbundled platform.

- 7. The Telecommunications Act of 1996 sets the stage for the introduction of competition and the dismantling of the local exchange bottleneck. This will require testing and operational experience with the new competitive regime to ensure that the procedures and relationships between Ameritech and the CLECs operate appropriately and that Ameritech has fully met its obligations to unbundle its local exchange network. On this issue, it is insufficient for Ameritech simply to make commitments on paper and then claim that it has opened its network to competition. There are countless operational, logistic, and legal issues that must be resolved, and resolution of those issues can only occur in the context of implementation of the procedures and processes that will govern the relationships between Ameritech and CLECs.
- 8. In this regard, the dispute over "shared" transport is illustrative. Ameritech and AT&T negotiated their interconnection agreement, and both sides had an understanding of what "shared" transport was. It was not until after the close of the record in the arbitration that it became clear that the parties had significantly different views as to the meaning of "shared" transport. Moreover, the prospective other interexchange CLECs in Michigan did not have the understanding of "shared" transport that Ameritech has proposed. This is not an isolated issue, but it illustrates the many implementation and operational issues that will arise in the course of opening the monopoly bottleneck to competition. There can be no claim that checklist items have

been "fully implemented" until these implementation and operational issues have been confronted and resolved.

- I. AMERITECH HAS FAILED TO OFFER THE UNBUNDLED SWITCH AND UNBUNDLED PLATFORM AS REQUIRED BY SECTION 271.
- 9. The local switch is the centerpiece of the local telecommunications network. It connects lines to lines, trunks to lines, trunks to trunks, lines to trunks, and provides key features, functions, and capabilities including dial tone, telephone number, vertical features, signaling, access to 911 service, operator services, directory assistance, and transport toll services. These are key elements in the provision of local telephone service. Given the central role of the switch in the local exchange network, it is not surprising that the Federal Act includes the switch within the definition of "network element" that must be unbundled, Section 251(c)(3), and includes as one of the competitive checklist items that "local switching [be] unbundled from transport, local loop transmission, or other services." Section 271(c)(2)(B)(ii).
- 10. The FCC has defined the unbundled local switching element as "line-side and trunk-side facilities plus the features, functions, and capabilities of the switch." First Report and Order, ¶ 412. These features, functions and capabilities include "the basic switching function of connecting lines to lines, lines to trunks, trunks to lines, trunks to trunks. It also includes . . . a telephone number, directory listing, dial tone,

signaling, and access to 911, operator services, and directory assistance. In addition, the local switching element includes all vertical features that the switch is capable of providing, ... as well as any technically feasible customized routing functions." The FCC made it clear that when a requesting carrier purchases the local switching element, it obtains access to all of the above features, functions and capabilities on a per line basis. The FCC also makes clear that the requesting carrier will pay the economic cost of this full complement of features, functions, and capabilities, regardless of whether or not the requesting carrier ultimately opts to activate any of these features on an individual line: "an upfront purchase of all local switching features may speed entry by simplifying practical issues such as the pricing of individual switching features." First Report and Order, ¶ 423.²

elements, consisting of the unbundled loop, NID, local switching, common and dedicated transport, signaling and call-related data bases, and tandem switching, that permits a new local service provider to offer local exchange and exchange access service. With this combination, a local service provider can offer a full range of telecommunications services to the end user and other carriers. With the unbundled platform, there is more

The vertical features of the switch are software-based features that include custom calling features such as call waiting, 3-way calling, and call forwarding, all of which are switch-based functions. In addition to vertical features, the Custom Local Access Signaling Services ("CLASS" features) such as Caller ID and automatic call-back use SS7 signaling on an interoffice basis for the exchange of information between telephone lines. Centrex service must also be made available if the capabilities are resident on the switch. First Report and Order, ¶ 412.

flexibility than with a resold service in which the carrier is merely purchasing on a wholesale basis what the ILEC already provides to end users. The unbundled platform is an important aspect of AT&T's proposed entry into the local exchange.

A. Ameritech's Restrictions on Call Termination Services

12. Ameritech's unbundled local switching ("ULS") element, as Ameritech has defined it, fails to comply with the FCC's requirement in several significant aspects and is designed to undercut the unbundled switch and unbundled platform as competitive alternatives for CLECs. First, in direct contradiction to the FCC First Report and Order, Ameritech has attempted to impose gross restrictions on a carrier's use of unbundled local switching. Ameritech restricts the ULS purchaser from using the ULS element to provide call termination services from other carriers -- local and toll providers -- that deliver traffic to the ULS carrier's customers. In effect, Ameritech is attempting to restrict the use of ULS to originating services only. Furthermore, Ameritech inexplicably proposes to deny the ULS purchaser the right to use the ULS element to provide both originating and terminating access for 800 service calls. While such a proposal may insulate Ameritech from access revenue decreases, it clearly violates the basic requirements for providing access to unbundled elements, along with the FCC's explicit determination that the purchaser of an unbundled element is entitled to all revenues for providing exchange and exchange access services. First Report and Order, ¶ 363.

B. Failure to Provide Billing Information

unbundled switch is not entitled to collect terminating access charges, Ameritech is not providing the information sufficient to permit the appropriate billing of customers and other carriers. Ameritech states that it will provide information on a daily and monthly basis to permit purchasers of the ULS element to "bill originating access carrier charges to the IXCs." Gebhardt Rebuttal Test., p. 51. Ameritech is silent, however, on providing necessary information regarding charges incurred by other carriers. AT&T needs complete recording information on all usage at the switch that it has purchased as an unbundled network element so that it can charge other carriers for access and termination charges. Without such information, AT&T will not be able to bill for those charges and will be denied the revenues associated with the use of the switch.³

C. Inclusion of Charges Already in Purchase Price of ULS

14. Third, Ameritech seeks to collect additional charges from purchasers of the ULS that are properly included in the purchase price of the ULS element. For example, Ameritech charges its retail customers a Centrex Common Block charge as part of its Centrex service and seeks to impose on AT&T a nonrecurring charge

³ Additionally, Ameritech presumably intends to bill these access charges to the carriers, thus not only collecting revenues to which it is not entitled but also double recovering the costs.

of \$409.09 for each common block and an additional monthly recurring charge of \$381.05 for "System Features, per common block" (Interconnection Agreement, Sch. 30.19-9). Purchasers of the ULS are not retail customers, however, and pay for all the features and functions of the switch in the unbundled switch charge. As the Common Block feature is a feature of the switch, the ULS charge includes this Common Block feature, and Ameritech may not charge separately for the Common Block feature.

D. Failure to Provide Appropriate Customized Routing

with respect to either the basic ULS offering or the ULS offering when used as part of the unbundled platform. Rather, Ameritech attempts to limit the routing function of its ULS element to routing predetermined by Ameritech, effectively bundling the basic ULS element with Ameritech's own retail services. Ameritech proposes to consider "custom" or "specialized routing" only through the BFR process. Ameritech claims that it is

In addition, Ameritech has proposed an inappropriate charge for "Billing Development." The costs that Ameritech has identified as being recovered by this charge (see Dunny Rebuttal Test., pp. 30-31) are items that are necessary to convert Ameritech's system to make the competitive environment established by the 1996 Act possible. As such, those are costs that should be recovered from all users of the network, including Ameritech users. Accordingly, these costs should be recovered in a competitively neutral manner and should not be borne solely by those parties that are using the ULS service.

If AT&T sought to provide local exchange service via unbundled local switching throughout Ameritech's Michigan territory, and were forced through the "Billing Development charge" to pay Ameritech nearly \$31,000 per switch for the privilege of being billed for the unbundled switching element, the up front costs — before signing up a single customer on the unbundled element — would exceed \$12 million. If MCI and WorldCom also sought to compete on a statewide basis via unbundled local switching, they would be forced to make the same upfront payments, bringing Ameritech's windfall close to \$36 million! As formidable as this barrier would be for a large carrier such as AT&T, this unreasonable charge would certainly deny small competitors any meaningful opportunity to compete.

making customized routing available to ULS subscribers by "provid[ing] routing of calls placed by end users of carriers who subscribe to ULS in the same manner that it routes calls placed by its own end users" (Dunny Rebuttal Test, p. 26). That is not customized routing at all, but rather the standard routing that Ameritech claims it is making available to all its ULS customers as a standardized offering. Ameritech also asserts that a "general offering of such customized routing cannot be made since each request for special routing is dependent upon what each carrier is seeking" (Id.).

16. Ameritech's approach is flatly inconsistent with the FCC's First Report and Order. The FCC stated that the ULS includes any "technically feasible customized routing functions" (First Report and Order, ¶ 412). In addition, the ILEC is required to make modifications to its network to accommodate new entrants and the requirements of competition (Id., ¶ 202).⁵

This language makes explicit Ameritech's obligation to implement customized routing as part of the basic unbundled local switching element at no additional cost.

What is new about custom routing in the context of unbundled local switching is that Ameritech does not currently use such routing to support multiple competing carriers, and some additional provisioning of routing capabilities and modification of existing facilities will likely be required. The FCC was well aware of the fact that the implementation of unbundled elements would require some amount of development and modification of existing facilities. The First Report and Order addressed this issued directly:

[&]quot;[t]he term 'feasible' implies that interconnecting or providing access to a LEC network element may be feasible at a particular point even if such interconnection or access requires a novel use of, or some modification to, incumbent LEC equipment. This interpretation is consistent with the fact that incumbent LEC networks were not designed to accommodate third-party interconnection or use of network elements at all or even most points within the network. If incumbent LECs were not required, at least to some extent, to adapt their facilities to interconnection or use by other carriers, the purposes of sections 251(c)(2) and 251(c)(3) would be frustrated. . . . [t]he incumbent must accept the novel use of, and modification to, its network facilities to accommodate the interconnector or to provide access to unbundled network elements." First Report and Order, ¶ 202.

- 17. Ameritech's costs for any modifications to its existing facilities that are required to permit unbundled access in accordance with the FCC's First Report and Order should be recovered in a nondiscriminatory, competitively neutral manner. Rather than placing the entire burden on the new local competitors, none of which currently has any significant share of the local exchange and exchange access market, with the cost of making the modifications necessary to permit all parties to compete in the local exchange market, Ameritech itself must pay an appropriate share of that cost.⁶
- 18. It is interesting to note that Ameritech proposes to provide unbundled local switching in combination with its own operator services and directory assistance elements. Ameritech includes, as part of its "standard" unbundled local switching element, access to Ameritech's operator services and directory assistance. As discussed further below, if a competing carrier wants to combine Ameritech's unbundled

As an example of a competitively neutral cost recovery, the FCC in its First Report and Order on Telephone Number Portability (CC Dkt. No. 95-116), found that a competitively neutral cost recovery standard for interim number portability was appropriate because "number portability is a network function that is required for a carrier to compete with the carrier that is already serving a customer." (Telephone Number Portability, First Report and Order, ¶ 131). The same rationale applies to customized routing and unbundled local switching. In defining competitively neutral cost recovery, the FCC found that "the recovery mechanism should not have a disparate effect on the incremental costs of competing carriers seeking to serve the same customer." (¶ 132). Clearly, if a competing carrier's costs to serve a customer via unbundled local switching (which by definition includes customized routing) were inflated beyond the incumbent's efficient forward-looking costs (which include a reasonable profit) due to discriminatory charges for routing, that competing carrier would indeed be harmed by the disparate effects of those costs. While the incumbent could serve the customer and incur no incremental cost for routing traffic to its preference (current "standard line class code" routing), the competing carrier that purchased unbundled local switching would incur an additional cost to serve that customer with its preferred routing. In response to the FCC LNP order, Ameritech has repriced its interim LNP services at \$0.00 pending the resolution of a cost recovery investigation by the Commission. Ameritech, as well as other carriers, are tracking the costs of interim LNP to assure accurate cost recovery when the cost recovery mechanism is determined.

local switching element with its own operator services or directory assistance, it must make a special request to Ameritech for such routing. In effect, this special request process establishes an obstacle for carriers that seek to obtain the combined elements they are most likely to require in combination (e.g., loop and switch), while at the same time, and in a completely contradictory manner, Ameritech has created a similar obstacle for carriers that seek to combine an Ameritech-provided element (local switching) with the element carriers are most likely to self-provision in the near term (operator services and directory assistance).

E. Failure to Provide Customized Routing of OS/DA

operator services and directory assistance ("OS/DA"). AT&T's entry strategy relies on the use of AT&T's operator services and directory assistance platforms. AT&T believes that its OS/DA platforms are a valuable asset that differentiates its services from that of its rivals, and it wishes to provide its own operator and directory assistance services to local service customers in situations where it is providing local services, either through local services resale or through purchase of unbundled network elements. AT&T wants all operator and directory assistance calls from AT&T local service customers to be routed from the incumbent LEC switch to AT&T's OS/DA platforms. This can be accomplished by customized routing. The technical feasibility of customized routing has been recognized by a number of RBOCs, such as Bell Atlantic, Southwestern Bell, and